

WHITE PHASE IN FLOWER DEVELOPMENT IN CYPRIPEDIUM ACAULE — Flowering plants of *Cypripedium acaule* were unusually abundant in the Williamsburg, Virginia, area in April and May of 1969: populations of hundreds of specimens were frequent.

On April 28th a friend showed me a young plant with a white lip. I had not noted this condition before, but subsequent search over the next few days revealed the lips of all young flowers in the area to be white and to become pink with maturity (Fig. 1).

Low temperatures for the period involved ranged from the mid-30's to the mid-40's. Could these unseasonably low temperatures account for the white phase in the development of these flowers? We shall attempt to get an answer another year by bringing young plants into temperature-controlled chambers.

Is there a likelihood that f. *albiflorum* of this species is temperature induced? It is at least provocative that in certain areas near the White Mountains the white form replaces the pink (Anderson, 1936) and that f. *albiflorum* has been reported in the mountains as far south as North Carolina (Correll, 1950).

We found pollen from ten plants in the white phase and from ten in the pink to be normal.

LITERATURE CITED

- ANDERSON, EDGAR. 1936. Color variation in eastern North American flowers as exemplified by *Hepatica acutiloba*. *Rhodora* 38: 301-304.
- CORRELL, DONOVAN S. 1950. Native Orchids of North America. Chronica Botanica Co., Waltham, Mass.

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Fig. 1. White and pink phases of *Cypripedium acaule*, April 29, 1969, Williamsburg, Virginia. Photo by Col. D. W. Noake, printed two thirds natural size and reduced in publication.

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